

TWO NEW SPECIES OF *ALIENATES* (HEMIPTERA: ENICOCEPHALIDAE)¹

Gene Kritsky²

ABSTRACT: Two new species of *Alienates*, one from Cuba and one from Arizona, are described. A key to the males is also provided.

Barber (1953) erected the enicocephalid subfamily Alienatinae to accommodate the new genus *Alienates* and its only included species, *A. insularis*, described from the South Bimini Island, Bahamas. The Alienatinae can be separated from the other two enicocephalid subfamilies by a two-lobed pronotum and greatly reduced wing venation. Herein I describe the second and third known species of *Alienates*, which extend the distribution and illustrate some of the morphological adaptations of very small enicocephalids.

Genus *Alienates* Barber

Alienates Barber, 1953: Am. Mus. Novitates 1614:1 - 4. Type species *Alienates insularis* Barber, by original designation.

Male: length 1.25-1.50 mm. Head separated into three lobes by two transverse impressions, posterior lobe oblong, pressed against anterior lobe (Fig. 1). Eyes and ocelli large. Antenna incrassate, long. Pronotum smooth, divided into two lobes. Scutellum with three lobes. Foreleg stout, tibia with three long spines at apex and cleaning comb on side nearest body. Tarsus with two short claws without spines. Middle and hind tarsi each one segmented. Forewings with 2 - 4 veins. Genitalia with posterior apophysis arising below anus. Anus surrounded by the lateral and median sclerites.

Alienates millsii, new species

Length 1.49 mm. Body light brown, covered with short setae. Head 0.36 mm long with anterior lobe as wide or wider than posterior lobe. Eyes large, slightly longer than posterior lobe of head. Ocelli large, placed far apart. Antennae: I, length 0.06 mm; II, 0.15 mm; III, 0.12 mm; IV, 0.19 mm. Anterior margin of pronotum twice as long as anterior lobe. Forelegs stout; femur length to width ratio 2.60, tibia length to width ratio 2.38. Forewing costa (C) shorter than cubital (Cu) vein (Fig. 2).

Holotype: male; Cuba, Soledad, near Cienfuegos; June 2, 1950, Berlese sample, H.B. Mills. The type is deposited at the Illinois Natural History Survey, Urbana, IL.

Alienates barberi, new species

Length 1.25-1.46 mm. Body light brown, covered with short setae. Head 0.30 mm long with anterior lobe slightly narrower than posterior lobe (Fig. 1). Eyes large slightly longer than

¹Received March 18, 1981

²Department of Biology, Tri-State University, Angola, IN 46703

posterior lobe of the head. Ocelli large, placed farther apart than in *A. millsii*. Antennae, I, length 0.05 mm; II, 0.12 mm; III, 0.11 mm; IV, 0.18 mm. Anterior margin of pronotum as wide as posterior lobe of head. Posterior lobe of pronotum $2\frac{1}{2}$ times as long as anterior lobe. Foreleg more slender than *A. millsii*, femur length to width ratio 3.37, tibia length to width ratio 3.55. Forewing venation with C, Cu, r-m, and partial Cu_1 (Fig. 3).

Holotype: male, four male paratypes, U.S.A., Arizona, Boyce Thompson Arboretum, near Superior; October 3, 1949, at light, B.W. Benson. The holotype is deposited in the Illinois Natural History Survey, Urbana, IL.

Discussion

The presence of *Alienates barberi* in Arizona extends the range of the genus well beyond the Caribbean. Whether this indicates a disjunct distribution will depend on the results of future collecting in intervening areas.

The females of *Alienates insularis* are apterous. Unfortunately, no females of the two new species have been found.

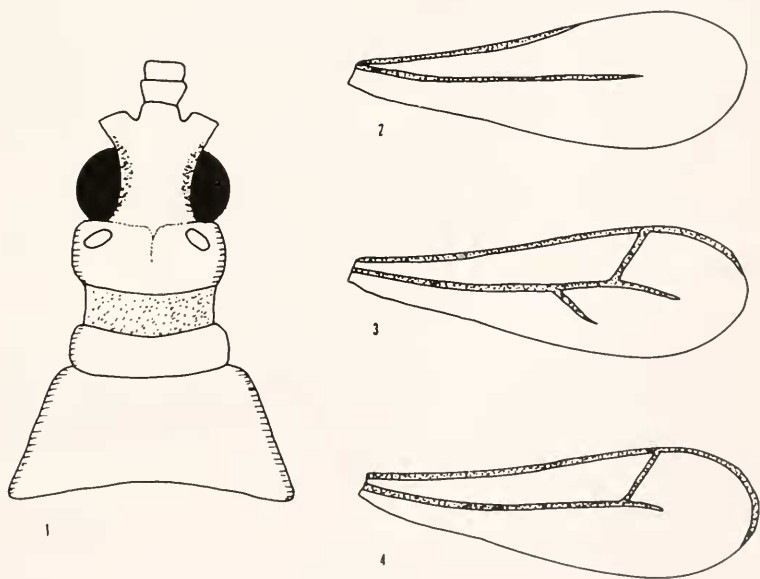


Fig. 1. *Alienates barberi* head and pronotum. Fig. 2. *A. millsii* forewing. Fig. 3. *A. barberi* forewing. Fig. 4. *A. insularis* forewing (drawn from paratype).

The following key will aid in separating the three species of *Alienates*.

Key to the males of *Alienates*

1. Forewing with only 2 longitudinal veins (Fig. 2), forelegs stout with length to width ratio of tibia and femur less than 3.0, posterior lobe of pronotum twice as long as anterior lobe.
 Forewing with 3 or 4 longitudinal veins, forelegs more slender with femur and tibia length to width ratio greater than 3.0, posterior lobe of pronotum more than twice as long as anterior lobe 2
2. Forewing with four veins (Fig. 3), posterior lobe of pronotum less than three times as long as anterior lobe *barberi*, new species
- Forewing with three veins (Fig. 4), posterior lobe of pronotum three times as long as anterior lobe *insularis* Barber

ACKNOWLEDGEMENTS

I wish to thank Lewis J. Stannard, José A. Mari Mutt, Richard C. Froeschner, and Pedro Wygodzinsky for their comments and encouragement. Part of this work was completed during my stay at the Department of Entomology, University of Illinois and the Illinois Natural History Survey.

LITERATURE CITED

- Barber, H.G. 1953. A new subfamily, genus, and species belonging to the family Enicocephalidae (Hemiptera: Heteroptera). Am. Mus. Novitates 1614: 1 - 4.

EMENDATION OF *EUMESOSOMA* COKENDOLPHER¹

James C. Cokendolpher²

Dr. Jürgen Gruber, of the Naturhistorisches Museum Wien, recently brought to my attention that *Eumesosoma* Cokendolpher 1980 (Arachnida: Opiliones) is not feminine in gender as I stated. The Greek stem "soma" (σωμα) is neuter. Accordingly, *Eumesosoma ocalensis* should be emended to *Eumesosoma ocalense* Cokendolpher 1980.

REFERENCE

- Cokendolpher, J.C. 1980. Replacement name for *Mesosoma* Weed, 1892, with a revision of the genus (Opiliones, Phalangiiidae, Leiobuninae). Occas. Papers Mus., Texas Tech Univ., 66:1-19.

¹Received March 26, 1981

²Department of Biological Sciences, Texas Tech University, Lubbock, Texas 79409.